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SUMMARY OF INITIAL BOARD ACTIONS

Updated
March 24, 2008

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This page informs the public of those open disciplinary matters in which the Board has concluded preliminary investigations and initiated formal disciplinary proceedings against an LSP. The Board initiates these proceedings by issuing the LSP an Order To Show Cause. In each instance, this Order summarizes the results of the preliminary investigation and directs the LSP to show cause why sufficient factual grounds do not exist to impose discipline upon the LSP. Upon receipt of an Order, an LSP can request an adjudicatory hearing to contest whether sufficient factual grounds exist to impose discipline against him/her, or, alternatively, can opt not to contest this and can seek to address the Board regarding what, if any, form or level of discipline is appropriate.

As a result of a regulation change in January 2003, when the Board concludes a preliminary investigation, it no longer makes a tentative decision regarding the form or level of discipline to impose. The decision regarding the form or level of discipline is now made at a later stage in the disciplinary process after the Board has finally determined that sufficient factual grounds exist to impose discipline and has reached final conclusions regarding those facts.

- LSP Board Complaint Number 06C-03
- LSP Board Complaint Numbers 99C-11 and 00C-14
- LSP Board Complaint Number 00C-04

LSP Board Complaint No. 06C-03

On January 9, 2008, the Board voted to commence formal disciplinary proceedings against an LSP. In the Order to Show Cause served on the LSP, the Board described the findings of the Board's preliminary investigation and concluded that these findings constituted sufficient grounds to discipline the LSP. This action resulted from a complaint filed by the Massachusetts Department of Environmental Protection ("MassDEP").

Summary of Findings

Based on the preliminary investigation, the Board determined that the LSP had violated the following Board Rules of Professional Conduct:

I. The LSP failed to comply with the Board's Rule of Professional Conduct at 309 CMR 4.02 (1) by failing to act with reasonable care and diligence in regard to the disposal sites outlined below. Examples of conduct that violated this regulation included, without limitation, the following:

   i. The LSP failed to address an open IRA condition in a Phase II submittal regarding Site A when the LSP knew or should have known that required IRA activities (namely indoor air sampling at an adjacent residence) needed to be completed.
   ii. In the Phase II submittal for Site A, failing to identify the residents in the adjacent residence as potential human receptors or to discuss vapor migration as a potential human exposure pathway to the adjacent residence.
   iii. In an Imminent Hazard (IH) Evaluation submittal for Site B that was based on a Method 3 Risk Characterization, the LSP assumed that the occupants of two downgradient residences spent only four hours per day on the first floors of their homes despite the fact that both homes had bedrooms on the first floors that were used and one residence also had a first floor office.
   iv. In the same IH Evaluation, the LSP relied on modeled indoor air data for the basements of the two residences that were orders of magnitude lower than the actual indoor air basement data collected by MassDEP, and were also two orders of magnitude lower than the actual indoor air sampling data collected by both MassDEP and the LSP on the first floors of both residences.
   v. In an RAO submittal based on a Method 3 Risk Characterization for Site C, the LSP did not adequately review the risk characterization prepared by a risk assessor and failed to note that some of the hazard indices cited in the Risk Characterization tables were above the limits allowed under the MCP and, therefore, that the LSP's conclusion that No Significant Risk Existed on the site was not adequately supported.

II. The LSP failed to comply with the Board's Rule of Professional Conduct at 309 CMR 4.02(3) by failing to rely in part upon the advice of one or more professionals whom the LSP reasonably determined were qualified by education, training and experience at Sites B and C by relying on Method 3 Risk Characterizations prepared by risk assessors that the LSP knew or should have known were flawed.

III. The LSP failed to comply with the Board's Rule of Professional Conduct at 309 CMR 4.03(3)(a) by failing to exercise independent judgment at Sites B and C by not reviewing and/or rejecting portions of the Method 3 Risk Characterizations that were flawed.

IV. The LSP failed to comply with the Board's Rule of Professional Conduct at 309 CMR 4.03(3)(b) by failing to follow the requirements and procedures set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000.

V. The LSP failed to comply with the Board's Rule of Professional Conduct at 309 CMR 4.03(3)(c) by, among other things, failing to review the MassDEP file when taking over as successor LSP-of-Record at Site A.

VI. The LSP failed to comply with the Board's Rule of Professional Conduct at 309 CMR 4.03(3)(d) by, among other things, failing to include indoor air sampling data MassDEP had obtained from the basements of two residences when preparing an Imminent Hazard Evaluation for Site B.

Background of Case
SITE A

The Site A property was very small in scale, measuring approximately 17 by 55 feet, and was located in a dense urban area. A dry cleaning business was located in a two-story wooden structure on the property. The two-story structure occupied over 90 per cent of the property with the east and west walls of the building abutting the buildings on neighboring plots and the south wall abutting the approximate property line. Adjacent to the east of the property was a building that had a residential apartment on the second floor.

In July 2001, the property owner reported a release to MassDEP of the dry cleaning solvent tetrachloroethene (PCE) to soil. In October 2001, MassDEP assigned a Release Tracking Number (RTN) to the release. In 2002, the prior consultant was engaged by the property owner to conduct additional assessment. In June 2002, this consultant discovered a second release condition on the property: greater than five milligrams per liter (5 mg/L) total volatile organic compounds (VOCs) were present in groundwater within 30 feet of the adjacent residence and within 15 feet of the ground surface. The consultant notified MassDEP of the release. MassDEP assigned a second RTN to the site for the new release condition and directed that Immediate Response Action (IRA) activities including indoor air sampling be performed at the adjacent residence.

The prior consultant submitted an IRA Plan for evaluation of indoor air at the adjacent residence to MassDEP on August 26, 2002. As stated in the IRA Plan, the objective was to evaluate indoor air conditions (relative to PCE) in the basement and second floor residential apartment of the building and to determine if a Critical Exposure Pathway (CEP) and/or a Condition of Substantial Release Migration (SRM) existed.

Another person had owned and operated the dry cleaning business on the Site A property since approximately April 1997 and leased it, with an option to buy, from the property owner. In October 2002, the LSP prepared a draft proposal regarding a limited subsurface investigation for the owner of the dry cleaning business who was considering purchasing the Site A property. The draft proposal indicated that the LSP was aware that IRA activities were required regarding the

second release condition. The LSP prepared a second proposal dated September 5, 2003 that also indicated the LSP was aware that IRA activities were required.

In January 2004, the LSP's client bought the Site A property and began taking responsibility for response actions. As of January 2004, the prior owner had not undertaken the required IRA activities. In June 2004, the LSP became LSP-of-Record for the site. On June 18, 2004, the LSP filed a Phase II Comprehensive Site Assessment, Phase III Comprehensive Site Assessment and Phase IV Remedial Implementation Plan Submittal (Phase II submittal) with MassDEP. The LSP indicated in his/her Phase II submittal that s/he was aware of both the original RTN and the second RTN that required the IRA activities. S/he stated in the submittal that s/he assumed the two RTNs had been linked in MassDEP's database. S/he wrote on page 1:

> On July 12, 2002, [the prior consultant]. … submitted a Phase I (Phase I) Site Investigation Report and Tier Classification on behalf of … the prior owner (former PRP) for the Site. …Please note that based on the review of the DEP's BWSC Site/Reportable Release Look Up searchable website, [the second RTN] was closed on July 12, 2002 (see attached printout). It appears that [the second RTN] has been linked to [the original RTN]. However, there is no mention of this in the Phase I/Tier Classification report, nor on the BWSC Transmittal Forms.

The LSP was incorrect when s/he stated in the Phase II submittal that the transmittal form filed with the prior consultant's Phase I Report did not indicate that the two RTNs for the site were linked. The BWSC Form submitted to MassDEP on July 12, 2002 by the prior consultant clearly linked the second RTN to the original RTN.

The LSP, in the Phase II submittal, noted that the prior consultant submitted a Phase II Conceptual Scope of Work to MassDEP on July 25, 2002. The LSP did not mention that the consultant had also submitted an IRA Plan regarding the second RTN on August 26, 2002. On page 3 of the June 18, 2004 Phase II submittal, the LSP stated the following:

> Please note that based on the review of the DEP's BWSC Site/Reportable Release Look Up searchable website, [the second RTN] was closed on July 12, 2002 (see Appendix B). It appears that [the second RTN] has been linked to [the original RTN]. However, there is no mention of this in the Phase I/Tier Classification report, nor on the BWSC Transmittal Forms. [The LSP's firm] is assuming the information on the database is correct. However, if the information is not correct, then [the LSP's firm] will perform the necessary response actions in accordance with the MCP.

In the Phase II submittal, the LSP neither identified the residents in the adjacent building as potential human receptors nor discussed vapor migration as a potential human exposure pathway to the adjacent residence even though the groundwater was located within 30 feet of the residence, less than 15 feet below ground surface, and VOCs (tetrachloroethene and vinyl chloride) were present in groundwater at concentrations greater than the Method 1 GW-2 standard.

The LSP stated at an interview with a Complaint Review Team (CRT) from the Board held on April 5, 2007 that s/he assumed, based on the information on the MassDEP Web site, that the second RTN had been formally closed and the IRA activities were no longer required rather than that the second RTN was simply linked to the original RTN. At the interview with the CRT, the LSP also stated that s/he understood that when an RTN number is linked to another RTN for the same site, both RTNs remain open but, once linked, all documentation regarding the site would list only the original RTN. At the same interview, the LSP stated that it would be very unusual for MassDEP to have closed out an RTN in a situation where required IRA activities had not been carried out. On June 18, 2004, the same date the LSP filed the Phase II submittal, s/he also submitted a Tier II Transfer Submittal that stated that the LSP's client was assuming responsibility for response actions at the site as the new property owner. As part of the Tier II Transfer Submittal, the LSP included a BWSC Tier Classification Submittal Form. On that form, the LSP listed the second RTN for the site and indicated that s/he was linking it to the original RTN.

As detailed above, the LSP's proposals to his/her client and submittals to MassDEP indicate that s/he knew or should have known that the second RTN was still open and that the required IRA activities still needed to be addressed. On May 16, 2005, two MassDEP staff members visited Site A to meet with the LSP and his/her client. The purpose of the visit was to discuss the status of IRA activities because none of the required IRA status reports had been filed with MassDEP. One of the MassDEP staff members prepared a Release Amendment Form the same day of the site visit that stated, in relevant part: "… [The LSP] stated that [s/he] was not aware an IRA condition existed at the Site, and [s/he] was not aware the previous owner/LSP had submitted an IRA Plan to DEP in 2002 to address potential impacts to indoor air (PCE, vinyl chloride) at the nearby residence."

On April 19, 2006, MassDEP filed a complaint with the Board that alleged, among other things, that the LSP ignored, failed to notice or decided not to assess the previously-identified IRA condition and potential for indoor air contamination after taking over as the LSP-of-Record.

The Board found that it was not reasonable for the LSP to have concluded in June 2004 that MassDEP, on July 12, 2002, determined that IRA activities were no longer required and closed the second RTN. The release was first reported less than three weeks before on June 25, 2002. The prior consultant submitted a Phase I report on July 12, 2002 that linked the second RTN to the original RTN. The prior consultant stated that an IRA Plan would be filed to address the second RTN. MassDEP did not issue a Notice of Responsibility letter regarding the second RTN until August 2, 2002, and the prior consultant submitted an IRA Plan on August 25, 2002.

The Board concluded that the LSP knew or should have known that the required IRA activities regarding the second RTN were still required to be completed as of June 18, 2004 when s/he filed the Phase II submittal. The Board concluded that the LSP should also have addressed the open IRA condition in the Phase II submittal and the failure to do so violated 309 CMR 4.02(1), 4.03(3)(b), and 4.03(3)(c). The Board concluded that the LSP violated 309 CMR 4.03(3)(c) by not reviewing the documents in MassDEP's files regarding this site when s/he took over as LSP-of-Record. The Board concluded that the LSP violated 310 CMR 40.0835, as well as 309 CMR

4.02(1) and 4.03(3)(b), by failing, in the Phase II submittal, to identify the residents in the adjacent building as potential human receptors and to discuss vapor migration as a potential human exposure pathway to the adjacent residence because the groundwater was located within 30 feet of the residence, less than 15 feet below ground surface, and VOCs (tetrachloroethene and vinyl chloride) were present in groundwater at concentrations greater than the Method 1 GW-2 standard.

SITE B

The Site B property was a 16,000-square-foot parcel with a two-story commercial building. The commercial building was constructed in 1939 and has housed various retail occupants. Dry cleaning businesses had been tenants of the building since 1945. In 2003, a fire damaged the on-site building, including the dry cleaner. A new building was constructed after the fire and the old dry cleaning equipment was replaced with equipment that did not use PCE.

In November 1992, MassDEP conducted a soil gas survey on the property that detected PCE in three locations. MassDEP conducted the soil gas survey in an effort to identify the source of PCE and other VOCs that had been detected in water samples collected from a municipal well located approximately 0.7 miles southwest of the site. Use of this well was discontinued in 1979 after the contaminants (PCE and other VOCs) were detected in water samples. The town that owned the water rights to the municipal well was interested in exploring whether it could be reopened in the future.

MassDEP issued a Notice of Responsibility regarding Site B to the property owner in December 1992 based on the results of the November 1992 soil gas survey, the fact the property had been used as a dry cleaner since the 1940's, and the results of a hydrogeologic study commissioned by the town that owned the rights to the municipal well that was conducted from 1989 to 1992.

The site was classified as a Tier 1A site and granted a Tier 1A permit in January 1998. The LSP became LSP-of-Record for the site in 1999 and conducted the Phase II site assessment. On April 18, 2005, the Respondent filed a Class B-1 Response Action Outcome Statement based on a Method 3 Risk Characterization. The Risk Characterization was conducted by a risk assessor contracted by the LSP. The disposal site boundary as defined in the RAO Statement included a wide area that encompassed the Site B property, two downgradient residences, and extended to an area beyond the nearby pond. The RAO Statement included modeled indoor air results for the basements of the two downgradient residences and the LSP concluded there was no indoor air risk at the two residences.

On March 31, 2006, MassDEP issued a Notice of Audit Findings (NOAF)/Notice of Noncompliance (NON) stating that the RAO Statement was invalid. In addition to listing several violations of the MCP, the NOAF also stated that MassDEP was concerned, based on the modeled indoor air results for the two downgradient residences, about the potential for a Critical Exposure Pathway at both homes. MassDEP required that an Imminent Hazard Evaluation be conducted for the two residences.

On April 14, 2006, MassDEP used Suma canisters to collect samples over a four-hour period in the basements and first floors of both residences. On that same date, the LSP obtained air samples using Suma canisters from only the first floors of both residences. On June 1, 2006, MassDEP received an Imminent Hazard ("IH") Evaluation submittal prepared by the LSP. The LSP concluded in the IH Evaluation that neither an IH nor a significant risk existed from exposure to indoor air at the two residences. The LSP's IH Evaluation was based on a Method 3 Risk Characterization prepared by the same risk assessor who prepared the Method 3 risk characterization for the RAO submittal.

On November 20, 2006, MassDEP issued NONs regarding the IH Evaluation directly to the property owner, the LSP and the risk assessor. The NON addressed to the LSP stated that s/he violated 310 CMR 40.0022(2) by making inaccurate, misleading or incomplete statements in the IH Evaluation Opinion. One violation of 310 CMR 40.0022(2) noted by MassDEP was that the LSP made a misleading statement that the residents of the two downgradient homes spent only four hours per day on the first floors, thereby making the inaccurate conclusion that an IH condition did not exist at either residence. MassDEP stated that the 4-hour assumption was misleading and unsupported by site-specific factors because both residences had bedrooms on the first floors that were being used and a home office was located on the first floor of one of the homes. MassDEP also stated in the NON that this assumption also violated 310 CMR 40.0953(7) because it was not a conservative estimate of exposure, and violated 310 CMR 40.0955(2) and 40.0992(1) because the assumption did not accord with published MassDEP guidance documents that indicated 16 to 24 hours per day as the appropriate indoor air exposure duration for a resident.

Another violation of 310 CMR 40.0022(2) noted by MassDEP in the NON was that the Respondent made an incomplete statement in the IH Evaluation regarding the available indoor air data by failing to present and use the air sampling data obtained by MassDEP in the basements of both residences. The air samples obtained by MassDEP in the basements of the two homes on April 14, 2006 measured PCE concentrations of 6.04 and 16.4 $\mu g/m^3$, respectively. Neither value was used in the "Sample Collection and Analysis" section or the "Risk Characterization" section of the IH Evaluation Report. However, the MassDEP basement air sampling data was mentioned in the "Background" section of the IH Report and, therefore, the Respondent was or should have been aware of its existence when the IH Evaluation was submitted. Moreover, the risk assessor presented the full MassDEP set of indoor air sampling data in a letter to the residents of one of the homes dated May 26, 2006, prior to the submittal of the IH Evaluation report to MassDEP. MassDEP stated in the NON that the omission of the MassDEP basement air sampling data was all the more egregious considering that MassDEP's actual data were replaced in the IH Evaluation with modeled data that were orders of magnitude lower in concentration (0.098 and 0.075 $\mu g/m^3$ in the basements of both residences, respectively).

MassDEP stated that the failure to use MassDEP's basement data and to instead rely on modeled data that were orders of magnitude lower also violated 310 CMR 40.0953(7) because the modeled data were not a conservative estimate of exposure. The modeled basement data were also two orders of magnitude lower than the actual data from the first floors collected by both MassDEP and the LSP. The actual indoor air values for the first floors were as follows:

Residence No. 1		PCE ($\mu g/m^3$)	Residence No. 2		PCE ($\mu g/m^3$)
MassDEP	1st Floor	4.75	MassDEP	1st Floor	7.60
LSP	1st Floor	4.33	LSP	1st Floor	7.10

At the interview with the CRT, the LSP stated that s/he relied upon the risk assessor's judgment regarding the assumption that the residents spent only four hours per day on the first floors of their homes and that it was reasonable to rely upon the modeled basement data.

The Board concluded that the LSP's assumption that the residents spent only four hours per day on the first floors of their homes did not make sense considering the site-specific factors and was not sufficiently conservative. The Board concluded that the LSP should not have relied on the modeled basement data because not only were they orders of magnitude lower than MassDEP's actual data but also because they were two orders of magnitude lower than the actual data from the first floors collected by both MassDEP and the LSP. The Board concluded that the LSP knew or should have known that the modeled basement values were not reasonable considering both MassDEP's actual basement data and the much higher values collected from the first floors of the residences. Concentrations of contaminants that volatilize from groundwater into indoor air would be expected to be higher in the basement of a building compared to the upper floors not vice versa. The Board concluded that, by assuming that the residents spent four hours per day on the first floors of the residences and by relying on modeled basement air sampling data that were significantly lower than the actual data from the basements and first floors, the LSP violated the following rules of Professional Conduct: 309 CMR 4.02(1), 4.02(3), 4.03(3)(a), 4.03(3)(b), and 4.03(3)(d).

SITE C

The Site C property was an unpaved plot when the LSP became LSP-of-Record in 2003. The Site C plot was originally part of a larger piece of land that was subdivided in 1996. In January 1987, a release of oil and hazardous materials found on the larger plot was reported to MassDEP. The release was related to solid and liquid asphalt products, underground storage tanks, and contaminated "fill" materials (i.e., ash, cinders, etc.), formerly used on the property when it was operated as an asphalt batch storage facility. Remedial actions were carried out on the larger plot between 1989 and 1998. A Waiver Completion Statement (WSC) for the larger plot was filed with MassDEP in 1998. One of the conditions of the WCS to sustain a condition of No Significant Risk was that the entire plot be paved. While the eastern portion of the larger plot was redeveloped and covered with buildings or pavement, the western portion that comprised the Site C parcel was never paved and residual contamination remained exposed.

A buyer purchased the 0 Terminal Street parcel in May 2003 and engaged the LSP. Prior owners had left contaminated soil exposed on the Site C parcel in violation of the conditions of the WCS. The LSP believed that the available analytical and field data regarding the parcel indicated that a 120-day reportable condition for soil contamination existed there. The LSP submitted a Release Notification Form regarding the parcel to MassDEP in June 2003. MassDEP issued a new Release Tracking Number.

In July 2003, the Respondent filed a Release Abatement Measure ("RAM") Plan for the parcel that stated it was to be redeveloped as a paved vehicle parking lot and might also include construction of a vehicle maintenance garage. The RAM plan stated that the entire site would be paved and any contaminated soil moved during utility construction would be reused on site prior to paving. In accordance with the RAM Plan, the entire site was paved and an Activity and Use Limitation was implemented to ensure the site would remain paved in the future.

On June 24, 2004, the LSP filed a Class A-3 Response Action Outcome Statement for the parcel. The RAO Statement was based upon a Method 3 Risk Characterization prepared by a risk assessor. On December 20, 2005, MassDEP issued a Notice of Audit Findings ("NOAF") regarding the RAO submittal. MassDEP concluded in the NOAF that the RAO submittal did not demonstrate that a condition on No Significant Risk existed at the site due to problems with the Method 3 Risk Characterization including that some of the hazard index values cited in the Risk Characterization exceeded permissible risk limits established at 310 CMR 40.0993(6). MassDEP also cited in the NOAF that the risk characterization information was not clearly presented such as the breakdown of VPH and EPH data, describing the human environmental receptors and exposure pathways for each receptor, and presenting the cancer and non-cancer risks for each receptor.

At the interview with the CRT, the LSP stated that s/he discussed the data for the site with the risk assessor before s/he submitted the RAO, but did not discuss the assumptions relied upon by the risk assessor. S/he also stated at the interview that s/he did not review the Method 3 Risk Characterization before filing the RAO submittal.

The Board found that the problems with the Method 3 Risk Characterization (such as the fact that some of the calculated hazard indices were above the limits allowed by the MCP and, therefore, the LSP's conclusion that No Significant Risk existed on the site was not supported) should have been recognized by the LSP. The Board found that the LSP violated several of the Board's Rules of Professional Conduct (309 CMR 4.02 (1), 309 CMR 4.02(3), 309 CMR 4.03(a), 309 CMR 4.03(3)(b)) by failing to review the Method 3 Risk Characterization upon which his/her RAO opinion was based before filing the RAO submittal.

Order to Show Cause

The LSP will now have an opportunity to request a formal adjudicatory hearing to show cause why sufficient grounds do not exist to impose discipline.

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LSP Board Complaint No. 99C-11 and 00C-14

On October 9, 2003, the Board voted to commence formal disciplinary proceedings against an LSP. In the Order to Show Cause served on the LSP, the Board described the findings of the Board's preliminary investigation and concluded that these findings constituted sufficient

grounds to discipline the LSP. This action resulted from two complaints, one filed by the Department of Environmental Protection ("DEP") and the other by a private party.

Summary of Findings

Based on the preliminary investigation, the Board determined that the LSP had violated the following Board Rules of Professional Conduct:

VII. The LSP failed to comply with the Board's Rule of Professional Conduct at 309 CMR 4.02 (1) by failing to act with reasonable care and diligence in regard to the disposal sites outlined below. Examples of conduct that violated this regulation included, without limitation, the following:

vi. In the case of the three Downgradient Property Status Opinions for three separate sites, failing to disclose and explain known available information regarding each site's history that may have tended to have supported or led to a contrary or significantly different opinion; and failing to provide adequate support for the LSP's opinion that each site was not the source of any of the contamination found there.

vii. In the case of the RAO Opinions for three separate sites, failing to identify that groundwater at issue should have been classified as GW-1.

viii. In the case of the RAO Opinions for four separate sites, failing to determine the direction of groundwater flow, failing to define nature and extent of releases, and/or failure to adequately characterize risks posed by those releases.

iv. In the case of the RAO Opinion for one site, opining without adequate support that the vinyl chloride and NAPL detected on site were all migrating from an upgradient property.

VIII. The LSP failed to comply with the Board's Rule of Professional Conduct at 309 CMR 4.03(3)(b) by failing to follow the requirements and procedures set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000.

IX. The LSP failed to comply with the Board's Rule of Professional Conduct at 309 CMR 4.03(3)(c) by, among other things, in the case of RAO Opinions for five separate sites, failing to collect sufficient data to define the nature and extent of the releases and to adequately characterize the risks posed by those releases.

X. The LSP failed to comply with the Board's Rule of Professional Conduct at 309 CMR 4.03(3)(d) by, among other things, in the case of the DPS Opinions for three separate sites, failing to disclose and explain known available information that may have tended to have supported or led to a contrary or significantly different opinion.

Background of Case

In its initial investigation, the Board determined that, based on the poor quality of the LSP's work, the LSP did not adhere to the fundamental principles of site assessment or risk characterization. The Board also concluded, based on review of a number of the LSP's submissions, that certain fundamental problems repeated themselves throughout the LSP's work and had not been corrected even with two complaints pending before the Board. The fundamental problems identified by the Board were: 1) filing Downgradient Property Status Opinions without adequate data or in the face of contrary data, 2) failing to identify that the groundwater at issue should have been classified as GW-1, 3) failing to determine the direction of groundwater flow, and 4) failing to define the nature and extent of releases or to adequately characterize the risks posed by the releases.

A. Filing Downgradient Property Status Opinions without Adequate Data or in the Face of Contrary Data

In the case of three Downgradient Property Status (DPS) Opinions, the Board found that at each site the LSP did not include known information that suggested the site was the source or at least a contributing source of the release. The Board also concluded that, in the case of each of these three DPS Opinions, the LSP did not provide adequate support for his/her opinion that the site was not the source of any of the contamination found there.

a. DPS Opinion No. 1

On December 19, 1996, the LSP submitted a DPS Opinion regarding a release of chlorinated solvents at a property. The text of the LSP's opinion was only 2½ pages long. In the opinion, the LSP opined that the chlorinated solvents originated from an upgradient source. The LSP concluded that the sump pump located near the center of the property was drawing the chlorinated solvents vertically upward and that this was the reason levels of volatile organic compounds (VOCs) had been highest in the center of the site rather than on the upgradient border. The Board found that the LSP failed to provide adequate support for his/her opinion regarding the sump pump and that s/he failed to take any steps to investigate or confirm this theory. Two VOCs, tetrachoroethylene and trichloroethylene, were detected in a downgradient well but not in the upgradient wells. The LSP did not offer an explanation in the DPS submittal for this result.

In the text of the DPS opinion, the LSP referenced a June 1996 assessment report prepared by another consulting firm. This report indicated that reportable concentrations of chlorinated solvents were present in groundwater at the site, and described a long history of industrial operations at the site dating back to approximately 1919. The report concluded that it was likely that former industrial and manufacturing uses of the site had materially affected subsurface conditions there.

After DEP informed the property owner that DEP believed insufficient information had been provided in support of the DPS opinion, the site owner retracted the DPS submittal on March 24, 1999. In a letter submitted as part of the DPS termination, the LSP stated that newly discovered assessment reports had documented industrial use of the site that was previously not known.

While the LSP stated in the letter that this historical information regarding past industrial uses of the property had just come to light, this same information had been included in the 1996 report referenced in the DPS submittal.

b. DPS Opinion No. 2

This DPS Opinion was received by DEP on June 4, 1996. The text of the opinion was only two pages long and no analytical data was included with the submittal. The LSP opined in the submittal that the source of VOCs detected in groundwater at the site was one of four properties that the LSP alleged were upgradient. The LSP did not calculate the direction of groundwater flow at the site but stated: "groundwater flow in the vicinity of the site appears to be in an easterly to southerly direction." As pointed out by the LSP in the DPS submittal, the site was located in a Zone II Aquifer Protection Area.

The LSP stated in the DPS that, during site assessments conducted at the site in 1984 and 1985, petroleum hydrocarbons had not been detected in groundwater near the location where the VOCs at issue in the DPS were found. The Respondent also stated: "Although the site had been occupied by a gasoline station and fuel storage depot, both operations were closed in 1984 and the 1970's, respectfully." The Respondent stated that the VOCs were consistent with a recent gasoline-related release but no analysis was performed to ascertain whether this theory was correct. The site plan included with the DPS submittal indicated only a single groundwater monitoring well on the site and, as stated above, no analytical data was included with the report. The plan also did not indicate the locations of either the former ASTs or USTs or the locations where contaminated soil had previously been detected. However, a comparison between the site plan included with the DPS and the site plan in a 1984 assessment report suggests that the single monitoring well was located in the vicinity of the former gasoline USTs and pump islands.

The Board noted that the 1984 assessment report regarding the site stated that the site had been used as a gasoline station since 1949. The 1984 report also stated that, while no volatiles were detected in groundwater samples collected from a single borehole at the site, "the lab noted that contamination is present that is too heavy to show up on the volatile scan." The 1984 report concluded that the source of this groundwater contamination was likely number 2 fuel oil associated with a spill from a former fuel oil tank on the site. The Board also noted that a 1991 assessment report stated that, during a May 1985 study to determine the extent of petroleum contamination at the site based on its past use as a gasoline station, "common constituents were detected in the groundwater at the location of the former tanks, but not elsewhere." The 1991 report stated that "the largest area of concern [on the site] is the area where the four 20 foot high vertical above ground tanks were previously located." The report suggested the installation of additional soil borings and groundwater monitoring wells to "ascertain the levels and extent of petroleum subsurface contamination due to the location of former above ground petroleum and underground storage tanks at [the site]."

c. DPS Opinion No. 3

The LSP filed a DPS Opinion dated August 16, 1996 regarding gasoline detected at a site. While not discussed in the DPS Opinion, the site had been used for auto sales and service since 1931 and underground storage tanks had been located there. DEP had issued a release tracking number for this site in 1991 when free product was observed in a monitoring well near the location where two 3,000-gallon USTs had been previously removed. This monitoring well was located on the southern edge of the property adjacent to a street.

A 1990 site assessment report prepared by a different consultant stated that the well was located in the vicinity of two 3,000-gallon former USTs and that it was possible that the contamination detected in the well represented residual contamination from the previous tanks, or a regional condition. The report stated that the two 3000-gallon USTs had been removed from the site in April 1988 and "small amounts of gasoline were noted around the two tanks." A 1991 report prepared by a different consultant stated that petroleum product had been detected in the monitoring well on several different days in June 1991, and each time approximately 16 ounces of product was bailed from the well. The site map included with the 1991 report indicates that the well is located near the location of two former 3,000-gallon USTs.

In 1995, a new RTN was assigned to the site after one inch or more of non-aqueous phase liquid ("NAPL") gasoline was detected in this same monitoring well. In December 1995, the LSP had two monitoring wells installed in the street adjacent to the site. NAPL was identified in these two wells in January 1996.

The text of the LSP's 1996 DPS opinion was only two pages long. The LSP opined in the submission that the NAPL detected in the on-site well was from a gasoline station located across the street from and due south of the site. The LSP stated that the NAPL found in the on-site well appeared to be "fresh and unweathered," that sources of gasoline had been removed from the site, and that gasoline had not been stored at the site for many years. The LSP also wrote: "Hydrogeologic data suggested that regional groundwater flow is in a northerly direction." Therefore, the LSP concluded that, considering the discovery of NAPL in the two wells placed in the street to the south of the on-site well, the source of the contamination in the on-site well was the upgradient gasoline station. The LSP also indicated that there were several other gasoline stations in the vicinity with listed gasoline releases.

No analytical data was included in the DPS opinion. Groundwater flow direction was not calculated but was inferred. No analysis was done to test the LSP's theory that the gasoline detected in the on-site monitoring well was "fresh and unweathered." The DPS opinion included only a very limited site history and did not indicate that the monitoring well on site was located near the location of the two former 3,000-gallon gasoline USTs. Similarly, the site figure included in the DPS opinion did not indicate the location of the former tanks. No monitoring wells were placed within the tank excavation area to determine if any contamination was present.

B. Failing to Identify that Groundwater at Issue Should have been Classified as GW-1

In the case of three RAO Opinions reviewed by the Board, the LSP failed to identify that the groundwater at issue should have been classified as GW-1.

a. RAO Opinion No. 1

On October 21, 1998, the LSP filed a Release Abatement Measure (RAM) Completion Report and Class A-2 Response Action Outcome Statement for a 2.4-acre former manufacturing property. The submission included only 5¼ pages of text. The site was located within a Potentially Productive Aquifer, a DEP-approved Zone II and a town-designated Aquifer Protection District.

Even though the site was located within a DEP-approved Zone II, the LSP opined in the RAO Opinion that the site was not within a GW-1 groundwater classification area but rather that groundwater classifications GW-2 and GW-3 applied. The LSP opined: "The boundary of the Zone II is incorrect and should be modified based on model flaws, Site geology, and lack of contaminant transport." The LSP wrote that, based on a 1996 report regarding the town wells, "the Site is located at a point of stagnation between two wells. Therefore, groundwater from the Site will not move toward either well even during worst case pumping and drought conditions." The Class A-2 RAO was based on a Method 1 Risk Assessment. The LSP opined that no significant risk existed at the site because soil contaminant concentrations were below the Method 1 S-1 cleanup standards and groundwater contaminant concentrations were below the Method 1 GW-2 and GW-3 standards. Several compounds, including 1,1-dichloroethane, cis-1,2-dichloroethene, and trichloroethene, were detected at concentrations above Method 1 GW-1 standards. In addition, groundwater samples were collected from only three of the on-site monitoring wells prior to the filing of the RAO. The RAO report did not discuss groundwater flow direction, well depths or historic well data. The report stated: "Based on assessments and reports on file at the DEP, contaminants have not migrated from beneath the building, let alone the site, in more than 20 years."

As a result of a DEP audit of the RAO submission, DEP issued an NON to the site owner and an NON directly to the LSP for inappropriately classifying groundwater in a Department-approved Zone II. DEP required the site owner to Tier Classify the site or submit a Class C RAO. DEP also filed a complaint with the Board regarding the Respondent's misclassification of groundwater at this site.

Another environmental consulting company prepared a letter opinion dated November 13, 2000 for a prospective purchaser of the site. The opinion stated that in October 2000 the firm had installed six deep overburden and shallow bedrock groundwater monitoring wells at the site. The opinion stated that one well contained high concentrations of trichloroethylene, (TCE – 44,900 ug/l) 1,1,1,-trichloroethane (1,1,1 TCA – 32,000 ug/l), and 1,1 dichloroethylene (1,1 DCE – 3,200 ug/l). These levels were approximately 2 orders of magnitude above the levels previously seen, and four orders of magnitude above drinking water standards. The firm also opined in the letter that obtaining site closure under the MCP would require significant additional expense for

more site characterization, remediation, and long-term operation and maintenance of the remedial system.

b. RAO Opinion No. 2

On June 24, 1994, DEP received a Class A-3 RAO and revised Phase I report prepared by the LSP for a 17-acre industrial/commercial property. The Method 3 Risk Characterization completed for the site classified groundwater as GW-3 because the site was not within a Zone II, Interim Wellhead Protection Area, Potentially Productive Aquifer, Zone A of a Class A surface water body used for drinking water, and was not located greater than 500 feet from a public water distribution line or less than 500 feet from a private water well. In an NOAF dated October 9, 1995, DEP stated that, in fact, the site was included in a medium yield aquifer and, therefore, groundwater at the site should have been classified as GW-1. The LSP has acknowledged that GW-1 applied to the site at the time s/he filed the RAO opinion. The LSP has also acknowledged that s/he did not check the available maps that would have indicated that the site was in a medium yield aquifer before filing the RAO submittal.

c. RAO Opinion No. 3

On May 25, 1995, the LSP filed a Class A-3 RAO for a 6.8-acre industrial and agricultural site. The LSP classified groundwater at the site as GW-2. In an NOAF dated April 16, 1996, DEP wrote that the town's Zone II map shows the site within the Zone II and, therefore, the groundwater should have been classified as GW-1. The LSP has acknowledged that the site was within an approved Zone II at the time s/he filed the RAO opinion S/he also acknowledged that s/he neglected to research the town's aquifer protection maps before filing the RAO Opinion.

C. Failure to Determine the Direction of Groundwater Flow, Failure to Define Nature and Extent of Releases and/or Failure to Adequately Characterize Risks Posed by Those Releases

The Board concluded that the following RAO reports were characterized by a failure to determine the direction of groundwater flow, failure to define nature and extent of releases and/or failure to adequately characterize risks posed by those releases.

a. RAO Opinion No. 4

DEP received an RAO Statement dated April 18, 1995 for a property that had been occupied in the past by a research and development firm. The RAO Statement addressed a 1990 release of an unknown quantity of solvents that had leaked from 55-gallon drums in a fenced area outside the main building on the property and had stained soil.

The RAO Statement was only 1.5 pages long. The document stated that approximately 10 cubic yards of soil contaminated with trace concentrations of toluene and xylene were excavated on February 4, 1991. The document also stated that assessment included a soil gas survey and the installation of groundwater monitoring wells. However, the site map included with the RAO indicated that only a single monitoring well had been installed. The RAO stated that due to the

confined nature of the site (closely spaced buildings and bedrock outcrops) the monitoring well had been installed downgradient of the spill on an adjacent property. The direction of groundwater flow was not calculated. In the NOAF, DEP required installation of additional monitoring wells on site and collection of additional soil data.

The RAO Statement stated that analysis of a sample collected from this single monitoring well indicated VOCs were not present at detectable concentrations. No confirmatory soil samples were collected after the removal of the contaminated soil. Also, no other soil samples were collected during the installation of the single monitoring well on the adjacent property or at any other point during the site investigation. The Board concluded that insufficient soil and groundwater data had been collected to define the nature and extent of the release or to adequately characterize risk. The Board also concluded that the RAO submittal failed to include sufficient information about the site and the investigation activities undertaken there.

b. RAO Opinion No. 5

A Class A-2 RAO Statement was received by DEP on November 9, 1998. The RAO statement addressed a sudden release of approximately 3,000 gallons of No. 6 fuel oil at a manufacturing facility. The text of the report was only five pages long.

The fuel oil release had been reported on September 8, 1998 and resulted from the failure of a pressurized bleed line. The product was released within the on-site building and onto the facility floor. According to the RAO Statement, the released product migrated outside of the building and onto the concrete tank pad area for the 12,000-gallon UST that originally stored the product, onto a paved area, and onto an unpaved gravel driveway. The report also stated that the release migrated into a storm water catch basin that discharged to a wooded area north of the building.

During response actions carried out at the site between September 8 and September 17, 1998, approximately 7,500 gallons of No. 6 fuel oil and rinse water were collected from the site using a vacuum truck and high pressure cleaning equipment. Approximately 36.82 tons of oil-contaminated gravel/soil were removed from the site.

Sampling of soil to determine residual petroleum impacts was not performed following soil removal. Surface water was also not sampled even though petroleum impacts to a catch basin and soil at the associated outfall were documented. The Respondent wrote in the RAO Statement that the release was contained at the stormwater outfall, and surface water was not affected by the release. A soil sample was collected from the storm drain outfall. Analysis of the sample detected Extractable Petroleum Hydrocarbons (EPH) below S-1/GW-2/GW-3 Method 1 Risk Characterization standards. Concentrations of EPH target analytes were not detected.

After an audit inspection on February 18, 1999, DEP required that additional soil and surface water sampling be conducted. On April 5, 1999, DEP received correspondence from the LSP regarding the new sampling data. Soil samples were collected from five locations: two in the gravel driveway and three from discrete oil seep areas. The results of all five samples were used to calculate average exposure point concentrations. Laboratory results on one of the samples

collected from an oil seep area adjacent to the southeast wall of the on-site building revealed exposure point concentrations of EPH of 2,250 ppm C_{11}-C_{22} Aromatics. This concentration was above applicable S-2/GW-2/GW-3 Method 1 Risk Characterization standards.

In an NOAF dated April 30, 1999, DEP stated that areas of contamination that are not contiguous must be considered as separate exposure points and, therefore, based on the analysis of this one soil sample, a condition of No Significant Risk had not been achieved at the site.

On February 26, 1999, two surface water samples (one upgradient and one downgradient) were collected. Laboratory analytical results of the downstream sample detected polynuclear aromatic hydrocarbons (PAHs). In the April 1999 letter to DEP, the LSP wrote that the PAHs may not be associated with the outfall and that additional sampling would be undertaken to evaluate the condition. DEP required that the RAO Statement be retracted.

The Board concluded that insufficient soil, groundwater and surface water data had been collected to define the nature and extent of the release or to adequately characterize risk. The Board also concluded that the RAO submittal failed to include sufficient information about the site and the investigation activities undertaken there.

c. RAO Opinion No. 6

On July 25, 2000, DEP received a Class B-1 RAO by the LSP. The RAO was based upon a Method 1 risk characterization. Soil was classified as S-1 and groundwater was classified as GW-2 and GW-3. The RAO applied to a release tracking number issued by DEP in response to a release of gasoline from former gasoline underground storage tanks that were removed from the property on April 1, 1999. The LSP's RAO report stated that an abandoned 275-gallon fuel oil UST was also removed from the site on March 31, 1999.

The data included in the RAO report indicated that laboratory analysis of soil and groundwater samples collected on May 20, 1999, in the vicinity of the former fuel oil UST detected concentrations of petroleum hydrocarbons in excess of RCS-1 and RCGW-2 reportable concentrations. This condition required notification to the Department within 120 days, but no such notification to the Department was ever made.

The text of the RAO report was only 4½ pages long, including the Method 1 risk characterization. The report did not indicate the direction of groundwater flow at the site, and it included no information regarding migration pathways, human and environmental receptors, current and reasonably foreseeable site uses, exposure points for contamination, disposal site history, or site hydrogeological characteristics.

The Method 1 risk characterization concluded that a condition of no significant risk with respect to groundwater contamination existed at the site even though a May 20, 1999, groundwater sample from a monitoring well located in the vicinity of the fuel oil UST excavation contained a concentration of C9-C18 aliphatic hydrocarbons (6,100 ppb) in excess of the Method 1 GW-2 standard of 1,000 ppb, and only one confirmatory analysis had been performed (on March 10,

2000) and found to be below the Method 1 GW-2 standard. The text of the RAO report did not discuss the May 20, 1999 groundwater result.

On February 14, 2001, DEP issued an NOAF to the site owners regarding the RAO Statement. The NOAF required that the RAO be retracted and either a Tier Classification Submittal or a new RAO Statement, based upon an adequate characterization of the fuel oil release at the site, be submitted.

The Board concluded that insufficient soil and groundwater data had been collected to define the nature and extent of the release or to adequately characterize risk. The Board also concluded that the RAO submittal failed to include sufficient information about the site and the investigation activities undertaken there.

d. RAO Opinion No. 7

The site was a former bus garage and a former truck repair facility that had been renovated circa 1984 to a warehouse for the dry storage of packaged food products. In 1985, ten underground storage tanks were removed from the site, floor drains were closed, and grease traps were removed.

On October 15, 2001, DEP received a Class A-3 RAO Statement prepared by the LSP. The RAO was based on a Method 1 risk characterization. As reported in the RAO report, in 1997 one inch of light non-aqueous phase liquid ("LNAPL") had been detected in three monitoring wells located near the southern boundary of the site. NAPL had been historically reported in this area. A concentration of 75 µg/L vinyl chloride had also been detected in one of the three monitoring wells in September 1999 (sole groundwater sampling event). This concentration exceeded the applicable Method 1, GW-2 standard of 2 µg/L. Also a groundwater sample collected from another one of the three wells in September 1999 exhibited a vinyl chloride level of 2 µg/L.

The LSP asserted in the RAO opinion that the LNAPL contamination present in the three wells and the vinyl chloride detected in two of the wells was all attributable to the upgradient property and, therefore, s/he excluded these exposure points and contaminants from the risk characterization. The LSP also asserted that extractable petroleum hydrocarbon (EPH) fractions that measured as high as 13,000 mg/Kg in on-site soil borings at two of the wells were also attributable to the upgradient property.

The LSP did not file a Downgradient Property Status Opinion. Rather, the LSP stated that the contamination detected in the southern portion of the site was attributable to the upgradient property and, therefore, was not part of the disposal site addressed in the RAO submittal. The LSP determined that the disposal site was limited to the immediate vicinity of the former USTs located near the loading dock/hardtop parking lot and excluded the areas of the former grease pits, floor drains, and midsection of the building where an underground tank used as a gas trap had existed.

The LSP stated in the opinion that in November 1996 a 3,000-gallon No.6 heating oil UST and a 5,000-gallon No.4/No.6 heating oil UST were removed from the upgradient property. The LSP stated that the tanks were deteriorated when removed and that approximately six inches of NAPL, which appeared to be No. 6 fuel oil, was detected in groundwater monitoring wells installed on the upgradient site after the tank excavation. The LSP also stated that results of a passive soil gas survey conducted at the site in 1997 supported an off-Site, upgradient source. The LSP opined in the RAO Opinion that residual contamination from potential on-site sources was "not significant in the context of Massachusetts General Law (M.G.L.) c. 21E in light of the off-Site contamination conditions affecting the Site."

DEP conducted an audit of the RAO Opinion and issued a Notice of Audit Findings in April 2003. Among the violations noted in the NOAF, DEP stated that the LSP's assertion that the LNAPL and vinyl chloride were migrating solely from the upgradient site was not adequately supported because, among other things: two of the monitoring wells were located in the midsection of the building near the former underground concrete tank (used as a gas trap) and the floor drain system, both of which have been identified by other environmental consultants as on-site sources of contamination; a 1985 report regarding the site had identified various on-site sources of contamination such as a UST used as a gas trap and piping connecting floor drains under the building; and another consulting firm had reported in 1987 that solvents used to paint and clean automotive parts inside the building were discharged into the groundwater by the on-site floor drain system. DEP also stated in the NOAF that the limited groundwater data failed to provide sufficient information to determine if the LNAPL was acting as an on-going source to groundwater, as a consequence of intermedia transfer. The NOAF stated that the RAO also failed to demonstrate that a level of no significant risk had been achieved at the site because the risk characterization excluded vinyl chloride without sufficient technical justification. The NOAF required that additional investigation be undertaken at the property and that a revised RAO be submitted.

The Board concluded that the LSP did not provide sufficient technical justification for opining that the contamination found on-site was unrelated to past site activities. The Board also concluded that the LSP failed to collect sufficient data from the site to define the nature and extent of the release or to adequately characterize risk.

Order to Show Cause

The LSP will now have an opportunity to request a formal adjudicatory hearing to show cause why sufficient grounds do not exist to impose discipline.

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LSP Board Complaint No. 00C-004

On July 22, 2003, formal disciplinary proceedings were commenced against an LSP by the filing of an Order to Show Cause. This disciplinary action resulted from a complaint alleging that the LSP committed fraud by charging a small town for almost 400 hours of LSP services over a period of 15 months for response activities at a site that resulted from the release of two ruptured

drums of creosote. In the Order to Show Cause served on the LSP, the Board described the findings of the Board's preliminary investigation and concluded that these findings constituted sufficient grounds to take disciplinary action against the LSP.

The proposed disciplinary action is based on the determination by the Board that the LSP violated the following Board Rules of Professional Conduct:

> 309 CMR 7.01(5), which provides that it shall constitute misconduct, and be grounds for appropriate discipline, for an LSP to engage in acts that involve dishonesty, fraud, deceit, and lack of good moral character; and that have a substantial connection to the professional responsibilities of an LSP.
>
> 309 CMR 4.02(1), which requires that an LSP act with reasonable care and diligence, and apply the knowledge and skill ordinarily exercised by LSPs in good standing.

Background of Case

This case came to the attention of the Department of Environmental Protection ("DEP") when the government of a small town in Massachusetts ("Town") contacted DEP to complain about the length of time it took to get a Response Action Outcome ("RAO") statement filed for a release that occurred at a town construction site. The Town also complained to DEP about the mounting costs shown on invoices that the Town was receiving for what the Town saw as a minimal amount of work performed at the site. DEP subsequently filed a Complaint with the Board against the LSP, alleging that the LSP engaged in fraud by billing for LSP services that were not actually provided, and failed to act with reasonable care and diligence by not submitting an RAO within a reasonable time.

Invoices submitted to the Town included costs for LSP services that the LSP had billed to the prime contractor for the site. The prime contractor had hired the LSP to perform LSP Services at the site. The LSP was billing $125 per hour for his/her services and the prime contractor was in turn billing the Town $200 per hour for the LSP's services. All billing by the LSP was for LSP Services only and not for sampling, removal, or disposal of contaminated material.

On September 29, 1998, during excavation activities associated with construction of the Town project, two rusted, partially buried 55-gallon drums of creosote were ruptured, releasing approximately 100 gallons of product, which resulted in a 2-hour reporting condition. The architect working at the site on behalf of the Town notified the DEP of the release on that day. A DEP Release Log Form listed the LSP's name and telephone number as the LSP for the site. An IRA was orally approved by DEP, consisting of isolating and cordoning off the contaminated area and the sampling and analysis of the materials, followed by excavation and drumming of the contaminated soil, and proper disposal of the drums and the impacted soil.

On October 4, 1998, the Town's own emergency response team conducted some of the cleanup activities at the site as part of the Town's annual emergency hazardous materials response training activities. Six 55-gallon drums were filled with contaminated soil.

On October 15, 1998, DEP gave oral approval to the LSP to excavate up to an additional 200 cubic yards of soil in the area where the release from the drums occurred. Excavations were performed on three separate occasions during October 1998. A total of 15 soil samples and one "exposed groundwater" sample were taken for laboratory analyses during three reported sampling events.

On October 18, 1998, Town personnel again conducted response actions, excavating and removing 17 additional 55-gallon drums of contaminated soil. The results of post-excavation samples collected on October 18th indicated that more excavation was needed.

On October 30, 1998, Town personnel excavated additional impacted soil and placed it in four 55-gallon drums. This was the final excavation of soils from the site. No confirmatory soil samples were collected at the conclusion of the excavation activities on this day. In fact, confirmatory samples were not collected at the site until 12 months later on October 23, 1999.

On November 30, 1998, DEP received a written IRA Plan from the LSP consisting of four pages of text. The IRA Plan included a summary of response actions undertaken to date. The LSP stated in the IRA Plan that the release area did not seem to be widespread and that the contaminated soil was to be removed from the site. The IRA Plan also stated that an IRA Completion Report would be submitted to the DEP within 60 days of the completion of the IRA.

On December 15, 1998, 28 drums of contaminated soil were shipped off-site for disposal. Three additional drums of contaminated soil were shipped off-site for disposal on December 29, 1998. Soil disposal costs were not included in the LSP's charges for LSP Services. Disposal costs were billed to the Town by the Prime Contractor in addition to the LSP charges.

On February 1, 1999, DEP received an IRA Status Report from the LSP, stating that a total of thirty-one 55-gallon drums of creosote-impacted soil had been removed from the site and that "[a]dditional excavation and or sampling will be performed to complete the IRA". The Status Report consisted of a one-page letter with some attachments, including hazardous waste manifests.

By June 18, 1999, the Chairman of the Town Board of Selectmen ("Chairman") sent a letter to the local State Representative expressing the Town's concern that the cost of the cleanup for this site was approaching $100,000 for testing and cleanup of an area where two barrels of creosote and the remains of an old abandoned septic system were uncovered.

On July 28, 1999, DEP received a second IRA Status Report from the LSP. This Status Report (a one page letter) was essentially the same as the previous report, and no additional activities appeared to have been conducted.

On December 29, 1999, DEP received an IRA Completion Report, Method 1 Risk Characterization, and Class A-2 RAO statement from the Respondent, consisting of eleven pages of text with attachments consisting primarily of analytical reports. In the RAO, the Respondent

noted that the release area was about 400 square feet in size and that there was no release to groundwater, only soil. No groundwater monitoring wells were installed. According to the RAO, four post excavation soil samples were collected at the site on October 23rd and submitted for laboratory analysis to support the RAO. The report stated that all contaminants of concern were either non-detect or below applicable Method 1 standards.

Because the RAO was submitted after the applicable one year deadline and the site defaulted to Tier IB status, the Town was required to pay the cost for preparing two IRA Status Reports, a $750 RAO fee, and a $2,600 default Tier 1B fee, even though the site work was almost entirely completed within the first few months after notification of the release.

When the LSP was asked by Board investigators why s/he billed for three rounds of sampling for October 1999, the LSP replied that the samples collected during the first round were sent to the wrong lab. The LSP said that the second round of sampling also had problems; the LSP stated that there might have been problems with the preservation of the samples. The LSP said that the third round was necessary because of the problems with the first two rounds. The LSP said that s/he was present at the site for all three sampling events in October 1999.

In a letter dated January 23, 2001, addressed to the prime contractor, the Chairman asserted that the site was ready for closure by the end of 1998, but instead the project was dragged out for an entire year, resulting in additional bills to the Town in excess of $47,000, "despite the fact that there was no further remediation work to be performed in connection with the project."

On March 9, 2001, the LSP sent a letter to Town officials demanding that the Town pay the balance owed to her/him. The LSP claimed that s/he was still due to be paid $23,087 for LSP Services. The LSP stated that s/he had received $24,975 of a total due for LSP Services of $48,062 (billed at the rate of $125/hr).

The Chairman told Board investigators that he saw the LSP on site on only three occasions – once shortly after the release was reported, once when a second round of contamination was discovered, and once on July 17, 1999, when the LSP came to the Town in person to have the Chairman sign a Transmittal Form.

The current Superintendent of the Town Department of Public Works, who was an equipment operator at the site, told Board investigators that he saw the Prime Contractor on site several times, but never saw or met the LSP.

The Police Chief of the Town, who also served as the Town's Emergency Management Director and Civil Defense Director, said that his office was located directly across the street from the construction site, so he could see the site from his window. The Police Chief indicated that he saw the LSP on site on no more than five occasions throughout the whole time that the LSP was submitting invoices for work at the site.

The LSP stated to Board investigators that, because the project started as an emergency response, no written scopes of service or budgets were requested or prepared during the early phase of the

project, there was no initial cost estimate for the project, nor did the LSP's company enter into any written contracts or agreements relating to the project.

In response to a Request for Information by the Board's investigators, the LSP stated that all time sheets, field notes, telephone records, and telephone logs were discarded after his/her reports and bills for the site were prepared and submitted.

Conclusions of the Board

The Board found that this case involved more than a mere fee dispute. The LSP billed for almost 400 hours of LSP services over a period of 15 months to clean up two drums of creosote and the associated contaminated soil. However, the LSP was unable to provide documentary evidence to back up many of his claims.

The response actions performed at the site consisted of the removal of approximately thirty 55-gallon drums of contaminated soil from an area approximately 20 feet by 20 feet. The Town's own Emergency Response Team performed most of the cleanup work at the site. The work at the site was essentially complete by the end of 1998. The only tasks that were not completed during the 1998 Period were the final confirmatory sampling and the drafting and submission of LSP opinions necessary to close out the site.

The LSP submitted invoices for a total of 217.5 hours of work for the period from September 30, 1998 through December 31, 1998 ("1998 Period"). Without supporting documentation submitted by the LSP or elsewhere in the record, the Board found that there was insufficient evidence to substantiate the LSP's claim that s/he performed 217.5 hours of work during the 1998 period.

The LSP submitted invoices claiming charges for "DEP Interface" on at least 14 occasions during the 1998 Period. DEP records show contacts were made with the LSP on only five occasions during the same period, and each contact was less than thirty minutes. Without documentary or other evidence to support the LSP's invoices, the Board found that the LSP's assertions regarding "DEP Interface" were not credible.

The LSP also submitted invoices billing for "Laboratory Interface" or "Lab Interface" on 14 different occasions during the 1998 Period. Because only two sampling events occurred in 1998 consisting of eleven soil samples and one water sample, the Board found that the LSP's assertions that s/he communicated with the laboratory on fourteen separate occasions were not credible.

In November 1998 the LSP billed 25 hours for the preparation and submittal of a four-page IRA Plan, with a two-paragraph cover letter, a two-page attachment entitled "Service Constraints", two site figures, two copies of hazardous waste manifests, and a signed IRA Transmittal Form. The Board found the billing for the IRA Plan to be excessive.

The remainder of the billing during the 1998 Period was primarily for "Project Communications" (22 different days), "Data Review" (six different days), and "MCP Review" or "Regulatory Review" (12 different days). Given the nature of the contamination at the site, the Board found the LSP's billing for the 1998 Period to be excessive.

During the period from January 1, 1999, through December 31, 1999, ("1999 Period") the LSP continued to bill for LSP services. The LSP submitted invoices for 199.5 hours of work during the 1999 Period, after the contaminated soil was removed from the site. The LSP's invoices primarily billed for the following categories of work: "Project Related Communications"; "Regulatory Review"; and "Project Review". The LSP also billed for preparation of two IRA status reports; "site groundwater categorization research"; four site visits, including three soil sampling events in October 1999; lab-related activities; an IRA Completion Statement; and an RAO Report.

The first invoice submitted for the 1999 Period billed for 38.5 hours of LSP services between December 30, 1998 and February 15, 1999. The Board found that the only evidence of any work product from the LSP during this time period was a one-page IRA Status Report, with a few attachments. The Board found that the billing for the December 30, 1998 – February 15, 1999 time period was excessive.

Both IRA Status Reports submitted by the LSP, the first dated January 25, 1999, and the second dated July 22, 1999, consisted of a one-page letter with some attachments. The reports were dated and submitted seven months apart, but they are nearly identical. Yet, during the period from February 16, 1999, through July 30, 1999, the LSP submitted invoices for 75 hours of work.

When asked by the Board investigators what was done to account for the many hours of billing during the February 16 – July 30, 1999, time period, the LSP stated that s/he made phone calls to the Town, received calls from townspeople, reviewed the MCP regulations, and made site visits, claiming that s/he conducted more than one visit during this time frame. However, without supporting evidence to back up the LSP's assertions, the Board did not find those assertions to be credible, with one exception. The Board found that the LSP was on site on July 17, 1999. Based on its review of the two IRA Status Reports, and other evidence in the record, the Board found that, other than the July 17 site visit, the only other work performed by the LSP between February 16, 1999, and July 30, 1999, was the addition of two sentences to the second IRA Status Report. The Board, therefore, found that the billing of 75 hours for this time period was extraordinary.

The Board also found that the LSP was onsite for three sampling events in October 1999. However, the Board found that billing for all three sampling events was inappropriate, given that, according to the LSP, the samples were delivered to the wrong lab on one occasion and were not properly preserved on the second occasion, necessitating the third sampling event. During the period from July 31, 1999, through October 23, 1999, the LSP submitted an invoice for 25.5 hours of work.

During the period from October 24, 1999 through December 23, 1999, the LSP submitted invoices for 60.5 hours for laboratory-related work, a Method 1 Risk Characterization, and submittal of an IRA Completion Statement and RAO Report. The combined IRA Completion Statement and RAO Report consists of one eleven-page document, with attachments, including three site figures, many pages of lab results, and chain-of-custody documents. In the IRA Completion Report, the LSP noted that the release area was about 400 square feet in size and that there was no release to groundwater, only soil.

The Board found that, while the LSP billed for a total of 199.5 hours of LSP Services for the 1999 Period, s/he performed only the following work: four site visits, two one-page IRA Status Reports (essentially identical), and an eleven page IRA Completion Report/RAO.

The Board found that, given that the contaminated soil was excavated and removed from the site by the end of 1998, the Respondent's invoices submitted for the 1999 Period were completely inappropriate. (The invoices to the Town from the Prime Contractor during the 1999 Period added up to $39,900. The LSP, billing for 199.5 hours at $125 per hour, billed for $24,937.50 during the 1999 Period.)

Based on the review of all the evidence obtained in this investigation, the Board found that the LSP's assertions concerning the invoices s/he submitted were generally not credible. The evidence does not support the excessive amounts of billing submitted by the LSP for this site. The combination of the exorbitant billing charges and the LSP's failure to produce any time sheets, field notes, telephone records, or telephone logs to substantiate his claims undermine the LSP's credibility. Furthermore, the LSP's statements are contradicted by the statements of Town officials and employees.

The Board found the statements of the Town officials to be more credible than those of the LSP. For example, the LSP stated that his difficulty in tracking down the Police Chief to get his signature on Transmittal Forms was a possible clue that the Police Chief wanted to delay closure of the site in order to keep an LSP on site. However, after reviewing the Transmittal Forms, the Board found that there was very little delay in getting the Police Chief's signatures.

Findings of Noncompliance

The Board found that many of the LSP's assertions with respect to the invoices s/he submitted for this site are not credible. The Board thus found that a significant portion of the LSP Services billed for were not performed by the LSP. The Board also found that a significant portion of the billing was inappropriate and excessive. The Board further found that the excessive billing was intentional. Therefore, the Board found that the LSP violated LSP Board Rule 309 CMR 7.01(5) by engaging in acts that involve dishonesty, fraud, deceit, and lack of good moral character by billing for a significant amount of LSP Services that were never provided to the client.

The Board also found that the LSP's failure to ensure that confirmatory samples were collected on or shortly after October 30, 1998, when the final excavation occurred, unnecessarily prolonged the closing out of the site. Confirmatory samples were not collected until almost 12

months later on October 23, 1999. While the LSP claimed that he "pushed and pushed" the Prime Contractor to collect the confirmatory samples, the Board found that it was the LSP's responsibility to ensure that the confirmatory sampling was done shortly after the final excavation work was completed. Therefore, the Board found that the LSP's lack of diligent effort contributed to a missed RAO deadline, resulting in an additional cost to the Town of $2,600 in default Tier 1B fees, a $750 RAO fee, and $39,900 in additional LSP charges for the period from December 30, 1998, when the last drums of contaminated soil were removed, through December 29, 1999, when DEP received the IRA Completion Report and RAO Statement. As a consequence, the Board found that the Respondent violated 309 CMR 4.02(1), which requires LSPs to act with reasonable care and diligence.

Based upon the above findings, the Board concluded that sufficient grounds exist to take disciplinary action against the LSP. The level of disciplinary action to be taken against the LSP will be determined at a later date.

Order to Show Cause

The LSP will now have an opportunity to request a formal adjudicatory hearing to show cause why sufficient grounds do not exist for the Board to take disciplinary action or other disposition against the LSP, as described in 309 CMR 7.02.

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